

The Importance of ABAA's Quality Assurance Program for Contractors



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In the construction industry, ensuring quality and performance is paramount. One-way contractors can achieve this by utilizing the Air Barrier Association of America's (ABAA) Quality Assurance Program (QAP). Developed approximately 20 years ago, this program has been implemented in projects nationwide with remarkable success. Let's delve into why contractors should consider integrating this program into their projects.



Reducing Water Leakage and Enhancing Air Quality

Water leakage is a leading cause of construction defect claims, warranty call backs, and rework on a project. With less than 20% of construction managers in the United States having a formal functioning and effective quality assurance program, ABAA's QAP provides an invaluable supplement to ensure proper installation of the air barrier. The program acts as a second set of eyes on the job site, ensuring that materials are not only selected based on performance evaluations but are also correctly installed. This approach reduces rework and accelerates the installation process.

Over the last twenty years, building science has shown that a properly

installed air barrier significantly decreases water intrusion, mold, and condensation. It also enhances the building's air quality, ensuring comfort for occupants. This translates to fewer complaints about draftiness and poor ventilation, resulting in happier building occupants.



Energy Efficiency and Sound Performance

Beyond these benefits, an airtight building offers additional advantages. HVAC systems can perform as designed, and sound transfer from outside is minimized. Most importantly, energy savings are expected from an airtight building, allowing the building to perform more energy efficiently.

Comprehensive Four-Component Process

The QAP is a meticulously developed process consisting of four key components:

- 1. Evaluated Materials:** ABAA maintains a library of materials tested to current industry standards. These materials are readily accessible on their website, ensuring transparency of information and compliance with the standards.
- 2. Certified Installers:** Contractors must have over 3,000 hours experience prior to attending a three-day training course. The course covers building science, proper installation techniques, things to watch for on a project, hands-on installation, and daily testing procedures for installed materials. An ISO 17024 compliant certification exam is taken after the course to ensure their knowledge, skills, and abilities meet the highest standards.
- 3. Trained Auditors:** Auditors are trained and certified per ISO 17024, to identify deficiencies and installation issues specific to air barriers. Their training involves several days of rigorous coursework and examinations to ensure they are well-equipped to assess job sites effectively.
- 4. Audit and Compliance:** ABAA audits the Auditors reports to ensure consistency, completeness, and adherence to standards, providing a robust quality assurance process.

Integrating QAP into Projects

ABAA facilitates the integration of QAP into projects by offering useful tools on their website. Sample language and specifications can be downloaded directly, simplifying the process of specifying.

- **Division One:** The example section in Division 01 (which is available on the website) outlines project-wide requirements, ensuring that the entire building enclosure, including transitions to roofs and waterproofing systems, is covered.
- **Division Seven:** Detailed requirements for air barrier products are provided, including preinstallation meeting agendas and quality assurance requirements.
- **Mockups:** Within the specifications available online is sample language for mockups, including testing procedures, are provided. Testing mockups early in the project can prevent issues down the line, saving both time and money.
- **Field Quality Control:** Also included are guidelines for on-site testing and field quality control requirements, including the minimum number of ABAA audits based on project size.

Cost-Effective Investment

Despite its comprehensive nature, the QAP is a cost-effective investment. ABAA has been tracking data regarding costs



of the program for over 20 years. The program typically costs around 0.08% of the construction cost. For a \$50 million school project, this translates to just \$6,000 or 0.01% of the total cost. Considering the significant benefits in quality, performance, and energy efficiency, this is a small price to pay for ensuring a successful project.

Final Thoughts

ABAA's Quality Assurance Program offers contractors a proven framework to enhance quality, reduce risks, and improve performance in construction projects. With its comprehensive approach, clear guidelines, and cost-effective nature, integrating QAP into projects is a smart choice for contractors, committed to delivering excellence. By investing in quality assurance through ABAA's QAP, contractors can build with confidence, knowing they are adhering to industry-leading standards and delivering buildings that are safer, more energy efficient, durable, and comfortable for their occupants.